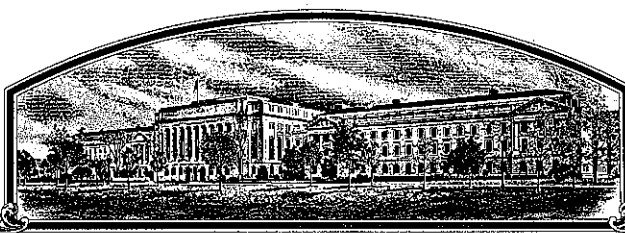


No.

9300172



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'2552'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this 30th day of September in the year of our Lord one thousand nine hundred and ninety-three.

Attest:

Kenneth H. Wood
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Mike Egan
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Pioneer Hi-Bred International, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. WBC797E1	3. VARIETY NAME AAA '2552' 1 Sept 1993
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) Dept. of Wheat Breeding R.R. 1 Box 297A Windfall, IN 46076		5. PHONE (include area code) (317) 945-7906	
6. GENUS AND SPECIES NAME Triticum aestivum	7. FAMILY NAME (Botanical) gramineae		
8. CROP KIND NAME (Common Name) Wheat		9. DATE OF DETERMINATION August 1, 1988	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Iowa		12. DATE OF INCORPORATION May 1926	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Dr. Gregory C. Marshall Pioneer Hi-Bred International, Inc. R.R. 1 Box 297A Windfall, IN 46076			
PHONE (include area code): (317) 945-7906			
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse) <ul style="list-style-type: none"> a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety. b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement. c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety. d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of Variety. e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership. f. <input checked="" type="checkbox"/> Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office <u>3/16/93</u> g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States." 			
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.) <input type="checkbox"/> YES (If "YES," answer items 16 and 17 below) <input checked="" type="checkbox"/> NO (If "NO," skip to item 18 below)			
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? <input type="checkbox"/> YES (If "YES," through <input type="checkbox"/> Plant Variety Protection Act <input type="checkbox"/> Patent Act. Give date: _____) <input checked="" type="checkbox"/> NO			
19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES (If "YES," give names of countries and dates) <input checked="" type="checkbox"/> NO			
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT [Owner(s)] Gregory C. Marshall		CAPACITY OR TITLE Coordinator of Soft Winter Wheat Breeding	
SIGNATURE OF APPLICANT [Owner(s)]		CAPACITY OR TITLE	
DATE 3/16/93		DATE	

14A. Exhibit A. Origin and Breeding History of Pioneer Wheat
Cultivar ~~WBC797E1~~.

'2552' AAA 1 Sept 1993

Pioneer cultivar WBC797E1, *Triticum aestivum* L., em Thell., a soft red winter wheat was developed by Pioneer Hi-Bred International, Inc.. Using a pedigree selection breeding method, WBC797E1 was derived from the three parent cross: 'Saluda'/'Feland'//Pioneer line 'W1050D'. The single cross: Saluda/Feland (designated 'WCB386') was made in the spring 1982 greenhouse cycle. In the fall 1982 greenhouse cycle, WCB386 was crossed to a '2555' sister line, W1050D. This final cross: WCB386/W1050D was coded 'WBC797'. The subsequent breeding history of WBC797E1 was as follows:

<u>Year</u>	<u>Generation</u>	
1982	Final cross	Cross designated WBC797
1983	F1	Grown in spring transplant nursery at Windfall, IN station.
1983-84	F2	Bulk populations grown at Windfall and Ft. Branch, IN. Selections made.
1984-85	F3	Headrows of F2 selections grown at Windfall and Ft. Branch, IN. Several rows selected for generation advance.
1985-86	F4	Seed from eight heads of each selected F3 headrow were planted in greenhouse at Hutchinson, KS. Two heads tracing to each of the eight F3 heads were harvested.
1986	F5	From each F4 head, one F5 hill plot was grown in spring transplant nursery at Windfall, IN station.
1986-87	F6	Headrows of F5 selections were grown at Windfall and Ft. Branch IN. This particular selection made at Windfall.
1987-88	F7	Preliminary yield testing of F5 selection cut from F6 headrow; selection designated as 'WBC797E1'.
1988-89	F8	Advanced yield testing of WBC797E1. 200 heads harvested.
1989-90	F9	Elite yield testing of WBC797E1. 100 purification headrows grown. Offtype rows destroyed and remaining rows individually harvested and threshed.
1990-91	F10	Elite yield testing continued. Seed from purification rows planted individually in progeny plots, which surrounded more purification headrows. Harvested seed constituted breeder seed, then turned over to Pioneer's Parent Seed Department for further increase.

14A. Exhibit A. (con't.)

1991-92	F11	Elite yield testing continued, designated as 'YW513'. Pioneer Parent Seed Dept. continued increase.
1992-93	F12	Elite yield testing continuing designated as 'XW513'. Pioneer Parent Seed Dept. continuing increase. Decision to release will be made in August 1993, at which time WBC797E1 will be assigned a commercial code.

'2552' NAA 1 Sept 1993
The cultivar WBC797E1 was bred and selected at each generation for any or all of the following characteristics: disease resistance, plant type, plant height, head type, straw strength, maturity, grain yield, test weight, and milling and baking qualities.

WBC797E1 has been observed to be uniform and stable since the seventh generation, or the last five generations. Variants may be slightly taller plants at a frequency of less than 1/45,000 plants.

14B. Novelty Statement

'2552' AAA 15 Sept 1993

WBC797E1 is most similar to Pioneer cultivar 2555, but with the following distinguishing characteristics:

- 1) The flag leaf of WBC797E1 at booting is erect and twisted while the flag leaf of 2555 is recurved and not twisted.
- 2) The spike density of WBC797E1 is mid-dense while the spike of 2555 is lax.
- 3) The anther color of WBC797E1 is yellow while that of 2555 is purple.
- 4) The glume length of WBC797E1 is mid-long while that of 2555 is long.
- 5) The phenol reaction of WBC797E1 is brown while that of 2555 is black.

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
BELTSVILLE, MARYLAND 20785

EXHIBIT C
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (TRITICUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Pioneer Hi-Bred International, Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

Dept. of Wheat Breeding
R.R. 1 Box 297A
Windfall, IN. 46076

FOR OFFICIAL USE ONLY

PVPO NUMBER

9300172

VARIETY NAME OR TEMPORARY
DESIGNATION

2552' 1 Sept 1993
~~WDC797E1~~ (temporary designation)

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g., 0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. KIND:

1 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:

2 1 = SPRING 2 = WINTER 3 = OTHER (Specify) 1 1 = SOFT 3 = OTHER (Specify)
2 = HARD

2 1 = WHITE 2 = RED 3 = OTHER (Specify)

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

2 2 5 FIRST FLOWERING 2 3 0 LAST FLOWERING

4. MATURITY (50% Flowering):

NO. OF DAYS EARLIER THAN 1 = ARTHUR 2 = SCOUT 3 = CHRIS 7 = 2555
1 NO. OF DAYS LATER THAN 7 4 = LEMHI 5 = NUGAINES 6 = LEEDS

5. PLANT HEIGHT (From soil level to top of head):

0 9 7 CM. HIGH
CM. TALLER THAN 1 = ARTHUR 2 = SCOUT 3 = CHRIS 7 = 2555
0 4 CM. SHORTER THAN 7 4 = LEMHI 5 = NUGAINES 6 = LEEDS

6. PLANT COLOR AT BOOTING (See reverse):

2 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHUR COLOR:

1 1 = YELLOW 2 = PURPLE

8. STEM:

1 Anthocyanin: 1 = ABSENT 2 = PRESENT 1 Waxy bloom: 1 = ABSENT 2 = PRESENT

2 Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT 1 Internodes: 1 = HOLLOW 2 = SOLID

0 4 NO. OF NODES (Originating from node above ground) 2 4 CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:

1 Anthocyanin: 1 = ABSENT 2 = PRESENT 2 Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

1 Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 2 Flag leaf: 1 = NOT TWISTED 2 = TWISTED
3 = OTHER (Specify):

1 Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT 1 Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

1 3 MM. LEAF WIDTH (First leaf below flag leaf) 2 0 CM. LEAF LENGTH (First leaf below flag leaf):

11. HEAD:

2 Density: 1 = LAX 2 = DENSE

1 Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE
4 = OTHER (Specify) _____

4 Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

7 Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED
5 = BROWN 6 = BLACK 7 = OTHER (Specify): tan

0 8 CM. LENGTH

1 3 MM. WIDTH

12. GLUMES AT MATURITY:

2 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.)
3 = LONG (CA. 9 mm.)

3 Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.)
3 = WIDE (CA. 4 mm.)

2 Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED
4 = SQUARE 5 = ELEVATED 6 = APICULATE

3 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

2 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

1 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

2 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

1 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

1 Cheek: 1 = ROUNDED 2 = ANGULAR

2 Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

1 Brush: 1 = NOT COLLARED 2 = COLLARED

4 Phenol reaction (See instructions): 1 = IVORY 2 = FAWN 3 = LT. BROWN
4 = BROWN 5 = BLACK

3 Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) _____

0 7 MM. LENGTH

0 4 MM. WIDTH

4 3 GM. PER 1000 SEEDS

17. SEED CREASE:

1 Width: 1 = 60% OR LESS OF KERNEL 'WINOKA'
2 = 80% OR LESS OF KERNEL 'CHRIS'
3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

1 Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT'
2 = 35% OR LESS OF KERNEL 'CHRIS'
3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

2 STEM RUST (Races) _____

2 LEAF RUST (Races) _____

0 STRIPE RUST (Races) _____

0 LOOSE SMUT

2 POWDERY MILDEW

0 BUNT

2 OTHER (Specify) Wheat soilborne mosaic virus
Wheat spindle streak mosaic virus

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

0 SAWFLY

0 APHID (Bydv.)

0 GREEN BUG

0 CEREAL LEAF BEETLE

0 OTHER (Specify) _____

HESSIAN FLY
RACES:

1 GP

1 A

1 B

1 C

1 D

1 E

1 F

1 G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

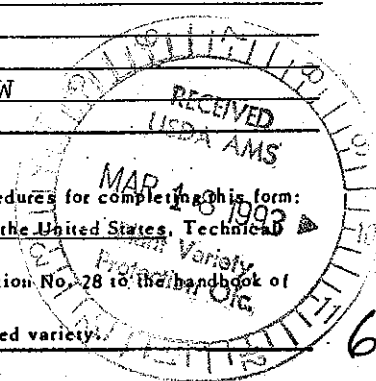
CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	2555	Seed size	2555
Leaf size	2545	Seed shape	2555
Leaf color	2510	Coleoptile elongation	2737W
Leaf carriage	2510	Seedling pigmentation	2555

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (a) L.W. Briggie and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.
- (b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

LEAF COLOR: Nickerson's or any recognized color fan should be used to determine the leaf color of the described variety.



14D. Exhibit D. Additional Description of the Variety.

1) Yield and agronomic data.

Preliminary yield testing began during the 1987-88 growing season and wide-scale yield testing has been conducted since the 1988-89 growing season to the present. WBC797E1 has shown adaptation to the eastern U.S. soft red winter wheat regions in test conducted in the states of Michigan, Ohio, Indiana, Illinois, Missouri, North Carolina, Kentucky, Tennessee, and Arkansas (Table 1).

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18 Sept 1993

2) Information on reaction to major diseases.

Leaf rust - Moderate resistance to prevalent races in northern soft wheat region, but may be susceptible in the southeastern U.S. Postulated to have genes Lr 1, 3, 11, and 13. Seedling tests conducted at Plant Disease Clinic at the University of Minnesota in cooperation with the USDA Cereal Rust Lab.

Stem rust - Postulated to have gene Sr 10; also tested at Plant Disease Clinic.

Powdery Mildew - Excellent resistance to the prevalent races of powdery mildew in the soft wheat region.

Soil Borne Mosaic and Wheat Spindle Streak Mosaic Viruses - Excellent resistances.

Leaf Blights - Excellent tolerance to the complex of the most common organisms that cause leaf blights; including Septoria tritici blotch, Septoria nodorum blotch, and tan spot.

3) Information on reaction to major insects.

Hessian fly - Susceptible to the predominant biotypes of Hessian fly in the "corn belt" region of the mid-west. Has screened susceptible to biotypes E, B, and C in testing conducted at the department of Entomology at Purdue University in cooperation with the USDA-ARS Insect and Weed Control Research Unit.

4) Information on milling and baking qualities.

WBC797E1 has demonstrated very good milling quality and satisfactory baking quality as compared to current predominant soft wheat varieties (Table 2).

Table 1. Varietal yield performance and agronomic characteristics as recorded in Pioneer Elite Yield Tests during the period 1990-1992.

Variety	Yield	Test weight	Height	Heading date	Wintr Hardi	Leaf rust	Leaf blt.	Powd mild	SSMV	SBMV@
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	bu/ac	lbs/bu	cm	Jan. 1	1-9¶	1-9¶	1-9¶	1-9¶	1-9¶	1-9¶
Northern States:										
WBC797E1	81.6	58.8	96.0	135.4	4.2	6.2	7.0	8.6	8.0	7.5
2548	80.2	57.9	94.7	135.4	4.3	6.4	5.3	6.4	4.3	2.0
2555	76.1	56.4	99.8	135.0	4.7	5.9	4.2	5.5	7.7	8.0
Cardinal	76.1	56.8	108.2	137.3	4.6	6.8	5.7	4.5	8.0	4.0
Clark	69.9	56.4	99.6	131.3	4.9	4.2	4.2	4.8	7.3	7.0
lsd(0.05)	3.5	1.0	2.3	0.9	0.7	1.0	1.0	1.8	1.9	1.3
# loc	31	16	8	8	5	5	3	4	2	1
# years	3	3	3	3	1	2	3	3	2	1

North Carolina:

WBC797E1	94.9	58.9	-	-	-	2.0	-	6.0	-	-
2548	82.1	56.0	-	-	-	5.0	-	4.5	-	-
2555	65.3	51.0	-	-	-	2.0	-	5.0	-	-
Cardinal	77.0	57.8	-	-	-	7.0	-	4.0	-	-
Clark	71.4	55.3	-	-	-	3.0	-	4.5	-	-
lsd(0.05)	12.6	3.2	-	-	-	-	-	1.6	-	-
# loc	3	2	-	-	-	1	-	2	-	-
# years	3	2	-	-	-	1	-	2	-	-

Upper Delta Region:

WBC797E1	87.7	59.6	-	-	-	-	-	-	-	-
2548	65.7	57.8	-	-	-	-	-	-	-	-
2555	76.7	56.8	-	-	-	-	-	-	-	-
Cardinal	74.9	59.4	-	-	-	-	-	-	-	-
Clark	78.4	59.0	-	-	-	-	-	-	-	-
lsd(0.05)	11.4	2.3	-	-	-	-	-	-	-	-
# loc	3	4	-	-	-	-	-	-	-	-
# years	1	1	-	-	-	-	-	-	-	-

¶ scale 1 to 9, where 9 = excellent or resistant; 1 = poor or susceptible.

@ Data collected at the University of Illinois SBMV nursery.

Northern State Locations: Truxton, MO; Altamont, IL; Mascoutah, IL; Carlisle, IN; Westport, IN; Windfall, IN; Ft. Branch, IN; Napoleon, OH; Pittsburg, OH; Bucyrus, OH; Blissfield, MI.

North Carolina Location: Edenton, NC.

Upper Delta Region Locations: Russellville, KY; Sikeston, MO; Union City, TN; Forrest City, AR.

Table 2. Soft wheat quality data 1988-1992 from the Pioneer Quality Lab, Johnston, Iowa.

AAA
1 Sept
1992

VARIETY	FLR YLD	BFL YLD	FLR PRO	FLR WR	CK	TOP GRN	TGR AB	MILLING SCORE	BAKING SCORE
^{2552'} WBC79/E1	74.0	36.2	9.1	56.8	19.3	4.6	6.6	7	5
# obs	12	12	12	12	5	5	5		
2548	70.1	36.6	8.6	56.4	18.9	3.6	6.3	5	4
# obs	39	39	39	39	30	30	30		
2555	72.5	40.0	8.5	53.7	20.0	4.9	7.2	8	8
# obs	42	42	42	42	33	33	33		
CARDINAL	72.4	35.8	9.2	54.4	19.4	5.0	7.1	6	6
# obs	16	16	16	16	11	11	11		
CLARK	69.3	35.5	9.2	55.6	19.2	4.6	7.4	4	5
# obs	10	10	10	10	7	7	7		

Trait abbreviations used in the above table.

FLR YLD -- Flour yield (%)

BFL YLD -- Break flour yield (%)

FLR PRO -- Flour protein (%)

FLR WR -- Flour Alkaline Water Retention Capacity (%)

CK -- Cookie diameter (cm)

TOP GRN -- Top grain rating of cookie (1-9)
(1= poor , 9= excellent)

TGR AB -- Top grain abnormalities of cookie (1-9)
(1= narrow valleys, 9= wide valleys)

MILLING SCORE -- Rating which weights Flour yield 60% and
Break flour yield 40% (1= poor, 9= excellent)

BAKING SCORE -- Rating which weights Cookie spread 60% and
AWRC 40% (1= poor, 9= excellent)

14E. Exhibit E. Statement of the Basis of Applicant's Ownership

2552
AAA
1 Sept 1993

Pioneer Hi-Bred International, Inc., Plant Breeding Division, believes it is the sole, original, and first breeder of the ~~WBC797E1~~ cultivar of soft red winter wheat for which it solicits a certification of protection.